

AMENDMENT TO THE CLAIMS

1. (Withdrawn) A hand-held stun gun for incapacitating a human target by generating a series of powerful electrical output pulses across first and second spaced apart output terminals in response to closure of a trigger, comprising:
 - a. a housing for enclosing a battery power supply and for supporting the trigger and first and second output terminals; and
 - b. a power supply having an electronic switch, an energy storage capacitor and a transformer for converting low voltage, direct current from the battery power supply into a series of high voltage output pulses across the first and second output terminals, each output pulse having pulse width greater than 7.52 microseconds when the first and second output terminals are applied to the human target.
2. (Withdrawn) The stun gun of Claim 1 wherein each output current pulse transfers at least about 0.9 Joules of energy from the first and second output terminals to the human target.
3. (Withdrawn) The stun gun of Claim 1 wherein the duration of each output pulse extends from 10 microseconds to 100 microseconds.
4. (Withdrawn) The stun gun of Claim 3 further including a cartridge mechanically coupled to the stun gun housing, wherein the cartridge includes first and second spaced apart, launchable darts coupled by first and second spoolable wires to the first and second stun gun output terminals.
5. (Withdrawn) The stun gun of Claim 4 wherein the voltage level and charge stored in the energy storage capacitor is sufficient to generate pulses having an energy content of from 0.9 Joules to 10 Joules.
6. (Withdrawn) The stun gun of Claim 5 wherein the power supply produces the high voltage pulses at a pulse repetition rate of from 2 to 40 pulses per second.

7. (Withdrawn) The stun gun of Claim 6 wherein the capacitance of the capacitor is rated at or above 0.88 microFarads.
8. (Withdrawn) The stun gun of Claim 1 wherein each output pulse includes a pulse energy of from 1 to 3 Joules.
9. (Withdrawn) The stun gun of Claim 8 wherein the duration of each output pulse extends from 10 microseconds to 100 microseconds.
10. (Withdrawn) The stun gun of Claim 9 wherein the power supply produces the high voltage pulses at a pulse repetition rate of from 2 to 40 pulses per second.
11. (Withdrawn) The stun gun of Claim 10 wherein the capacitance of the capacitor is rated at or above 0.88 microFarads.
12. (Cancelled)
13. (Currently amended) A method performed by a weapon, the weapon for generating a series of high pulse current and high pulse energy electrical output pulses across first and second spaced apart stun gun output terminals in response to closure of a trigger for incapacitating a human target, the method comprising the steps of:
- ~~a.~~ activating a battery powered power supply having an electronic switch in response to trigger closure to generate a high voltage output;
 - ~~b. a.~~ directing the high voltage output into charging a an energy storage capacitor for storing from 0.9 to 10 Joules of high voltage electrical energy in the energy storage capacitor; and
 - ~~e. b.~~ periodically discharging the energy storage capacitor through a transformer to generate a series of very high voltage output pulses across the first and second stun gun output terminals pulse to be conducted through tissue of the human target, wherein the series of output current pulses have pulse has a pulse width greater than 7.52 from 9 to 100 microseconds when the first and second output terminals are applied to the human target and wherein charging

~~provides from 0.9 to 10 Joules~~ 0.8 to 10 joules of energy is transferred through the first and second output terminals into the human target stored by the capacitor per pulse.

14. (Cancelled)

15. (Currently amended) The method of Claim 13 wherein each ~~output pulse includes a pulse energy level of~~ provides from 1 to 3 Joules joules of energy into a provided resistance of 1000 ohms.

16. (Withdrawn) A hand-held stun gun for generating a series of powerful electrical output pulses across first and second spaced apart output terminals in response to closure of a trigger, comprising:

a. a housing for enclosing a battery power supply and for supporting the trigger and first and second output terminals;
and

b. a power supply having an electronic switch, an energy storage capacitor and a transformer for converting low voltage, direct current from the battery power supply into a series of high voltage output pulses across the first and second output terminals, each output pulse having a pulse greater than 7.52 microseconds when the first and second output terminals are applied to a human target.

17. (Withdrawn) A hand-held stun gun as in Claim 1 in which said pulses are further characterized as having a pulse energy of from 0.9 Joules to 10 Joules and an RMS current flow of from 100 milliamps to 500 milliamps.

18. (Currently amended) A method ~~performed by a weapon, the weapon for generating a series of high pulse current and high pulse energy electrical output pulses across first and second spaced apart stun gun output terminals in response to closure of a trigger~~ for incapacitating a human target, the method comprising the steps of:

—— a. —— ~~activating a battery powered power supply having an electronic switch in response to trigger closure to generate a high voltage output;~~

b. a. ~~directing the high voltage output into charging a an energy storage capacitor for storing from 0.9 to 10 Joules of high voltage electrical energy in the energy storage capacitor;~~
and

e. b. ~~periodically discharging the energy storage capacitor through a transformer to generate in a secondary of the transformer a series of very high voltage output pulses current across the first and second stun gun output terminals comprising a recurring pulse to be conducted through tissue of the human target, wherein the series of output current pulses have each recurring pulse has a pulse width greater than 7.52 from 9 to 100 microseconds when the first and second output terminals are applied to the human target and wherein the series of output current pulses has an RMS current a magnitude of from 100 milliamps to 500 milliamps RMS.~~

19. (Withdrawn) A hand-held stun gun as in Claim 16, in which said output pulses are further characterized as having an energy of from 0.9 Joules to 10 Joules and an RMS current flow of from 100 milliamps to 500 milliamps.

20. (New) The method of claim 13 wherein charging provides from 1.5 to 5 joules of energy stored by the capacitor per pulse.

21. (New) The method of claim 18 wherein the current has a magnitude of from 100 to 500 milliamps RMS through a provided resistance of 1000 ohms.

22. (New) A method performed by a weapon, the weapon for producing contractions in skeletal muscles of a provided target to halt locomotion by the target, the method comprising:
generating a current to be conducted through tissue of the target, wherein the current comprises a plurality of recurring pulses during a period, wherein each recurring pulse has a pulse width of from 9 to 100 microseconds.

23. (New) The method of claim 22 wherein each recurring pulse has an energy of from 0.9 to 10 joules.

24. (New) The method of claim 22 each recurring pulse has an energy of from 0.9 to 10 joules into a provided resistance of 1000 ohms.
25. (New) The method of claim 22 wherein each recurring pulse has an energy of from 1 to 3 joules.
26. (New) The method of claim 22 wherein each recurring pulse has an energy of from 1 to 3 joules into a provided resistance of 1000 ohms.
27. (New) The method of claim 22 wherein the current has a magnitude of from 100 to 500 milliamps RMS for the period.
28. (New) The method of claim 22 wherein the current has a magnitude of from 100 to 500 milliamps RMS for the period through a provided resistance of 1000 ohms.
29. (New) The method of claim 22 wherein each recurring pulse is generated from stored energy, the energy having a magnitude of from 0.8 to 10 joules per pulse.
30. (New) The method of claim 22 wherein each recurring pulse is generated from stored energy, the energy having a magnitude of from 1.5 to 5 joules per pulse.
31. (New) The method of claim 22 wherein the plurality of recurring pulses has a pulse repetition rate of from 2 to 40 pulses per second.
32. (New) The method of claim 22 wherein the plurality of recurring pulses has a pulse repetition rate of from 5 to 15 pulses per second.